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1. *M. (Myoconcha) incurva*, C., Miocene, Foss. 52, 28, 1.
2. *M. (Mytilus) incrassata*, C., ib., 74, 42, 4.

## PECTENIDÆ.

## PECTEN, Lin.

*P. fraternus*.—Ovate, upper valve slightly ventricose, lower convex depressed; ribs 15 or 16, prominent; convex, laterally flattened, narrower than the interstices, trilineate, squamose; interstices with fine, unequal, delicately squamose radiating lines; lower valve, ribs broader, and more numerous lined; ears moderate, with radiating numerous rugose lines.

*Locality.* Virginia. (Miocene.)

Differs from *P. Jeffersonius* in being comparatively more elevated or ovate; in having smaller ears, and more numerous and narrower ribs, &c.

*P. Edgewoodensis*.—Suborbicular; height not quite equal to the length; lower valve-ribs 16 to 17, prominent, but not elevated, square or convex-depressed, not quite as wide as the intervening spaces, radiately lined with finely squamose striæ, most conspicuous towards the margins, interstices of ribs carinated, in the middle squamose and finely striated; ears with fine close unequal squamose radiating lines, the larger ones most prominent on the posterior side; margins of ligament pit carinated.

*Locality.* Edgewood Co., North Carolina. Cab. Smithsonian Institution.

Allied to *P. eboreus*; the carina between the ribs distinguish it from that species. (Miocene.)

## LYROPECTEN, Conrad.

Inequivalve, radiately costate; hinge with a triangular pit as in Pecten and diverging prominent teeth on each side the ligament cavity.

*Lyropectin (Pallium) estrellanus*, C., Pacific R. R. Reports, 1855, vi. pl. 3, f. 15.

This genus is peculiar to the Miocene of the Pacific slope, and appears in three large species, the second of which has been figured and described as *Pallium estrellanum*, in Pacific Railroad Reports, vol. vii. 191, but is very distinct from that species. I propose to name it *Volæformis*.

*L. crassicardo*.—Suborbicular; ribs 15; larger valve ventricose; ribs rounded, not quite as wide as intervening spaces; whole surface radiately striate with equal lines, about 11 on the ribs and 5 on the interstices; opposite valve convex, ribs prominent, narrower and more abrupt than in the large valve, disposed to be concentrically nodulous or undulated by broad concentric furrows, and sometimes an abrupt concentric truncation.

*Locality.* California.

## OSTRIADÆ.

## OSTREA, Lin.

*O. falciformis*.—Falcate, radiately ribbed; ribs numerous, regular, close, rounded, crossed by squamous lines; ribs small on the anterior depression; margins plicated, not crenulated; ligament cavity oblique.

*Locality.* Enterprise, Clark Co., Miss. Dr. Spillman. (Eocene.)

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Revision of the GULLS of North America; based upon specimens in the Museum of the Smithsonian Institution.

BY ELLIOTT COUES.

The present paper is an abstract of a more extended Monograph on the Gulls of North America, prepared for publication in a Government Report. 1862.]

As some time, however, may elapse before the appearance of the Report, it has been thought advisable to issue in advance this brief sketch of the subject. Except in the cases of one or two species, everything not absolutely necessary to the proper understanding of the subject has been omitted. In the Monograph alluded to will be found references to the pages of the works of the authors cited; descriptions of the various changes and stages of plumage; together with a discussion of doubtful points of synonymy, and the arguments for the views entertained. It is also illustrated by figures of the bills of all the species, and colored drawings of the primary quills, showing the outlines and extent of their markings. The gulls of North America are worked up to the fullest extent that the specimens at my command allow; but, in the apparent hopelessness of arriving at ultimate truth with regard to these birds, I am prepared to relinquish any of the views now entertained which future investigation may prove to be erroneous.

#### Family *LARIDÆ*.

The family Laridæ, embracing the Jägers, Gulls, Terns and Skimmers is divisible into four subfamilies, which may be distinguished by the following brief diagnosis:

**LESTRIDINÆ.**—Covering of upper mandible not continuous, the basal half with a somewhat horny overlapping plate, differing in character from the terminal portion; the nostrils opening beneath it, but slightly above the cutting edge, and beyond the middle of the bill. Tail cuneate, the central feathers projecting, usually tapering and much elongated, the lateral stiff and acuminate. Interdigital webs more or less rounded. Body full, stout; size usually moderate.

**LARINÆ.**—Covering of bill continuous. Bill more or less robust, the culmen about straight to the nostrils, abruptly decurved to the tip, which overhangs the tip of the lower mandible. An angular projection at the symphysis of the lower jaw more or less prominent. Nostrils at the end of the basal half of the bill. Tail generally even, the feathers being all of the same character. Webs more or less indented. Inner lateral toe moderate. Body robust; size very large or moderate.

**STERNINÆ.**—Covering of bill continuous. Bill slender and tapering to a very acute point, the tip not abruptly decurved, nor overhanging the lower mandible. Curve of culmen and commissure regular and gradual from base to tip. Angle of lower mandible scarcely apparent. Nostrils on the basal third of the bill. First primary greatly longer than the second. Tail generally forked. Inner lateral toes very short. Webs indented. Body rather slender and graceful; size moderate or very small.

**RHYNCHOPSINÆ.**—Bill excessively compressed, like the blade of a knife. Upper mandible abruptly shorter than the lower. Otherwise generally as in *Sterninæ*.

We have at present only to do with the second of these groups, the

#### Subfamily *LARINÆ*.

Of the many genera into which the Gulls have been divided by systematic writers, North America contains representatives of eight, which seem to differ in well marked characters. They may be arranged in two sections and very briefly defined as follows:

#### *A.—LARÆ.*

Size very large, large, or moderate. Body robust, general organization more or less powerful. Bill stout and deep, the angle prominent, the tip obtuse, seldom attenuated or much decurved. Tail never cuneate or decidedly

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forked. Legs rather stout; hind toe sometimes rudimental. Head never with a hood; in winter with the neck streaked with dusky. Under parts white without a decided roseate tint.

1. *Larus*.—Size large or moderate. Bill stout, robust, obtuse, the tip not attenuated, the angle usually very prominent. Convexity of culmen great at the ends. Color white, nearly always with a darker mantle. Tail even.

2. *Blasipus*.—Size moderate. Bill rather slender, its tip somewhat attenuated. General color dusky. Tail even, or very slightly emarginate.

3. *Rissa*.—Size rather small. Bill stout at base, but more attenuated and decurved at the tip. Angle acute, but not very prominent. Hind toe rudimental. Tail even; somewhat emarginate in the young.

4. *Pagophila*.—Size rather small. Bill short, stout, obtuse. Tarsus very short, stout, arm rough. Tibiæ partially feathered. Webs excised. Color entirely pure white.

#### B.—XEMEE.

Size moderate, small, or very small. Body more slender, general organization more delicate. Bill generally slenderer and more acute, the angle not very prominent, but acute, the tip decurved and attenuated. Tail variable,—even, forked, or cuneate. Legs rather slender. Hind toe always present. Head usually with a hood, or with a black ring round the neck. Under parts white, with a decided roseate tint.

5. *Chroicocephalus*.—Size moderate and very small. Bill slender, the tip more or less decurved. Tail even.

6. *Rhodostethia*.—Size small. Bill short and very slender. Neck with a black ring, but head without a hood. Tail cuneate.

7. *Xema*.—Size small. Bill short, rather slender, the angle acute. Head with a hood and neck with a ring. Tail moderately forked.

8. *Creagrus*.—"Of medium size; bill very strong and much curved; mantle grayish white; tail deeply forked."—Lawr.

The above brief characters define the genera sufficiently for our present purposes; the aim being rather the determination of species than rigid systematic classification.

#### Genus 1. *LARUS*, Linnæus.

*Larus*, Linn. 1744; nec 1735; (typus *L. canus*, fide Gray.)

*Gavia*, Moehring, 1752; nec auct.

*Leucus*, Kaup, 1829.

*Laroides*, Brehm, 1830; t. *L. argentatus*, Brünn. Bp. 1856; (typus idem.)

*Plantus*, Reichenbach, 1853.

*Glaucus*, Bruch, 1853; (t. *L. glaucus*, Brünn.)

*Dominicanus*, Bruch, 1853; (t. *L. marinus*, Linn.)

*Gavina*, Bp. 1854, fide G. R. Gray; nec Bp. 1856.

*Laroides*, Bruch, 1855; (t. *L. glaucus*, Brünn. = *Glaucus*, Bruch, 1853.)

*Leucus*, Bp. 1856; (t. *L. glaucus*, Brünn. Emend. *Leuc.* Kaup, 1829 = *Laroides* Bruch, 1855, vel *Glaucus*, Bruch, 1853.)

The eleven species of the genus found in North America may be very naturally arranged under the following sections or subgenera:

Section A.—*LEUCUS* Bp. (*Plantus*, Reich. *Glaucus*, p. Bruch, 1853, *Laroides* p. Bruch, 1855.) Large and powerful; primaries without any black; upper parts very light.

a. Color above entirely white.

1862.]

1. *LARUS HUTCHINSII* Richardson.

?*L. glacialis*, Benicken (nec Macgill. qui *L. glaucus*, Brünn.) *Glaucus glac.* Bruch, 1853. *Laroides glac.* Bruch, 1855. *Leucus arcticus*, "Macg." Bp. 1856, excl. synon. (nec Macg.) *Larus Hutchinsii*, Richardson, F. B. A. 1831, ii. 419.

*Sp. char.*—Adult: Bill flesh-colored at base, blackish on terminal third. Entire plumage pure white, the shafts of the feathers straw yellow. Feet light flesh-color. Young: Head, neck and upper parts mottled with light reddish brown, appearing on the latter as irregular patches, and on the rump as more or less obsolete transverse bars. Under parts a nearly uniform very light reddish brown, the under tail coverts transversely barred with white. Wings and tail pure white. Length  $27\frac{1}{2}$  inches; extent 60; wing  $17\frac{3}{4}$ ; bill above 2.40; along gape 3.20. Tarsus 3.40; middle toe and claw 3.50.

*Hab.*—Arctic America; North Pacific; New York State!

The name "*Arcticus* Macgill." is usually applied to this bird. Bonaparte adopts the name in his *Conspectus*, moreover, considering it identical with *L. argentatus* of Sabine's *Memoir on the Birds of Greenland*. But both these authors speak of a notable amount of blue on the back,—("back pure pearl gray, with a good deal of blue"—"*cærulescente-perlaceo*.") Moreover, Macgillivray himself subsequently says that his *arcticus* is the *leucopterus* Faber. I have not been able to find the original description of *glacialis* of Benicken; but Bruch, who adopts that name, speaks of the "gull-blue" of the upper parts. In the *Fauna Boreali-Americana*, ii. p. 419, there is given a brief description of a Gull, which is certainly, I think, the present species. The names "*arcticus*" and "*glacialis*" being in my opinion untenable, I adopt that of *Hutchinsii*, proposed by Richardson. I have no doubt of the validity of the species.

This species is now introduced into the *Fauna* of the United States through a specimen killed in Washington co., New York, and presented to the Smithsonian Institution by Mr. Peter Reid. It was killed in midwinter, while feeding on a dead sheep. Other specimens were collected by Mr. Stimpson in Behring's Straits, while connected with the North Pacific Expedition under Capt. Rodgers, U. S. N.

*b.* Color above very light pearl blue. Primaries like the back, fading insensibly into white at some distance from the tips.

2. *LARUS GLAUCUS* Brünnich.

*Larus glaucus*, Brünn. 1764 et auct. *Laroides glauc.* Bruch, 1855. *Leucus glauc.* Bp. 1856. *Plantus glauc.* Reich. 1853. *Larus consul*, Boil, 1822. *Glaucus cons.* Bruch, 1853. *Larus islandicus*, Edmonston, 1822, nec Edm. 1823. *Larus glacialis*, Macgill. 1824; (nec Benick.) *Larus leucereutes*, Schlep. *L. leucopterus*, Vieill. *L. giganteus*, Benick. fide Bp.

*Sp. char.*—Length 29 inches; extent 62; wing 18.5. Bill above 2.75, along gape 3.75; height at nostril .80, at angle .85. Tarsus 3.00; middle toe and claw 2.75. (Dimensions sufficient to separate it from *leucopterus*, the only other N. A. species in this group, (*b.*)

*Hab.*—Arctic seas, coming southward in winter. Labrador in summer.

3. *LARUS LEUCOPTERUS* Faber.

*L. argentatus*, Sub. 1818; nec Brünn., nec auct. *L. argentatus*, var. Temm. *L. arcticus*, Macgill.; (nec *Leucus arct.* "Macg." Bp. 1856.) *Larus leucopterus*, Faber; (nec Vieill., qui *L. glaucus*, Brünn.) *Laroides leucop.* Bruch, 1855. *Glaucus leucop.* Bruch, 1853. *Leucus leucop.* Bp. 1856. *Plantus leucop.* Reich. *Larus islandicus*, Edmonst. 1823, nec 1822. *Larus glaucoides*, Temm. 1840. *Laroides glaucoides* et *leucopterus*, Brehm, fide Bp.

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*Sp. char.*—Length 24 inches, wing 16·75. Bill above 1·80, rectus 2·80, depth at angle ·65. Tarsus and middle toe and claw 2·26.

*Hab.*—"Arctic seas; Baffin's Bay; Labrador." (Lawr.)

c. Color above pearl blue. Primaries about the color of the back to the very tips, which have well-defined, rounded, white apical spots.

4. *LARUS GLAUCESCENS* Lichtenstein.

*Larus glaucescens*, Licht. *Laroides glauc.* Bruch, 1855; (nec *Glaucus glaucescens*, Bruch, 1853, qui *Larus chalconotus*.) *Leucus glaucescens*, Bp. 1856. *Larus glaucopterus*, Kittlitz, fide Bruch. *Glaucus glaucopterus*, Bruch, 1853.

*Sp. char.*—Bill long and rather weak, the upper mandible projecting considerably beyond the lower, the convexity of the culmen comparatively slight. Angle pretty well defined, the outline between it and the tip about straight. Adult: Mantle pearl blue, much the same shade as in *argentatus*. Primaries slightly deeper than the back, all with rounded, well-defined apical spots of white. First, Base not appreciably lighter than the body of the feather, with a well-defined white spot on both webs, near the end, separated from the white apex by a transverse band of the color of the body of the feathers; second, third and fourth, basal portions notably lighter than the terminal, fading into pure white at their junction with the latter, without spots except the apical ones; fifth, sixth, basal portions the color of the back, fading into white near the end, separated from the white apices by a band (narrowest on the sixth) of the color of the outer primaries.

*Young of the year.*—Bill black. Everywhere deep grayish, somewhat mottled with whitish, the feathers of the back, wings and upper tail coverts edged, tipped and crossed by more or less regular transverse bars of grayish white. Length about 27 inches, wing 16·75. Bill above 2·25, gape 3·25, height at angle ·70; tarsus 2·60, middle toe and claw 2·50.

*Habitat.*—Pacific coast of North America.

One of the later discoveries, and a very distinct and well-marked species.

5. *LARUS CHALCOPTERUS* Licht.

*Glaucus glaucescens*, ("Licht."), Bruch, 1853; (nec *Laroides glaucescens*, (Licht.) Bruch, 1855. *Laroides chalconotus*, Bruch, 1855. *Leucus chalconotus*, Bp. 1856. *Larus chalconotus*, Lawr. 1858.

*Sp. char.*—Adult: "Entirely similar to *leucopterus*, except in the primaries, which are ashy gray, with rounded white apical spots." Young: "Dark gray, as in *glaucopterus*," (of Kittlitz = *glaucescens*, Licht.)

*Habitat.*—"American coast of Behring's Straits, and Greenland."

A species I have never seen. The diagnosis is copied from Bruch's Monograph. This author, in saying that the primaries of the bird are "ashy gray, with rounded white apical spots," reduces the characters in this respect precisely to those of *glaucescens*, Licht. Then, the bird being "like *leucopterus*, except on the primaries," must be separated from *glaucescens*—throwing out of consideration the primaries, acknowledged to be identical—by those points in which *leucopterus* differs,—viz.: smaller size, somewhat differently shaped bill, and lighter mantle. In a word, *chalconotus* is a *leucopterus* with the wings of *glaucescens*.

If the characters given are constant, the species is doubtless a valid one. If so, it is the smaller analogue of *glaucescens*, and bears the same relation to that species that *leucopterus* does to *glauca*.

Section B.—*DOMINICANUS* Bruch. Very large and powerful; color above dark blackish slate; primaries crossed with black near the end.

6. *LARUS MARINUS* Linnæus.

*Larus marinus*, Linn. 1776. *Dominicanus marinus*, Bruch, 1853 et 1855. 1862.]

*Larus naevius*, Gmel. 1788 (juv.) *Larus maculatus*, Bodd. fide Bp.; (nec Brünn.) *Larus maximus*, Müller, et Fabricii, Brehm, secundum Bp.

*Sp. char.*—First primary with a large white space at the tip,  $2\frac{1}{2}$  inches long. Young: Fully as large as the adult; the bill as large, but the angle less developed, entirely black. Upper parts dusky chocolate brown, everywhere mottled with whitish and light rufous, (the latter on the back and wings,) the feathers being tipped and the wing coverts deeply indented with this color. Under parts mottled with white, or rufous white and dusky, the throat mostly immaculate. Primaries and tail deep brownish black, the former at the extreme apex tipped, and the latter tipped, subterminally barred, and with the outer feather mottled with whitish. Length 30 inches, extent '65, wing 18.50.

*Habitat.*—North Atlantic, coming south in winter. Florida (Aud.)

A full description of the adult appeared unnecessary. That of the young was drawn up from a specimen taken from its nest while in the downy state, and reared by the writer until full grown.

Section C.—*LAROIDES* Brehm. (*Larus*, Kaup; *Glaucus*, p. Bruch, 1853.)  
Mantle lighter than in B, darker than in A. Primaries crossed with black near the ends.

a. Large; bill robust; angle prominent. "Herring-gulls."

I. A rounded, white subapical spot on the first primary. Legs flesh-colored

#### 7. *LARUS OCCIDENTALIS* Audubon.

*Larus occidentalis*, Aud. *Glaucus occid.* Bruch, 1853. *Laroides occid.* Bruch, 1855.

*Sp. char.*—Bill large, robust, very stout and deep, the culmen very convex at the end, the angle strongly developed, making the under outline doubly concave. Adult: Mantle dark bluish ash, almost slate color, the tips of the secondaries and tertiaries white, the line of demarcation distinct. Primaries: first three black throughout their exposed portions, the outer white for some distance at the tip (1.75 inches), crossed near the end with an irregular black bar; the shafts entirely black; the second without a white spot but its tip and the tips of all the others white. The young of the year: Bill entirely black, rather shorter than in the adult, but at the same time with great comparative depth at the angle. Everywhere a deep blackish brown, mottled with grayish white, the feathers of the upper parts edged and tipped with that color. Rump and upper tail coverts barred with whitish and dusky. Primaries and tail uniform deep blackish brown, with scarcely lighter tips, the former without tips. Length 24 inches, extent 55, wing 15.5. Bill above 2.30, along gape 3.10; height at nostril .75, width .40, height at angle .85. Tarsus 2.75.

*Habitat.*—Pacific coast of North America.

A very strongly-marked species.

#### 8. *LARUS SMITHSONIANUS* Coues.

*Larus argentatus*, auctorum americ. *L. argentatus ex America*.

*Sp. char.*—Adult: Mantle typical "gull-blue;" much lighter than in *occidentalis*, lighter than in *brachyrhynchus*, much as in *Delawarensis* and *glaucescens*, darker than in *glaucus* or *leucopterus*. Bases of primaries a but slightly lighter shade of the blue of the back, not so light nor extending so far, (especially on the first primary,) nor so broad at the end as in *Californicus*; on the first the light portion is very short, falling five or six inches short of the white spot, is not lighter at its juncture with the black, nor does it extend further on the central portion than on the edge of the feather; on the second, third and fourth the light bluish extends about the same distance (about four

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inches from the tip of the second), and runs further up along the centres of the feathers than on the edge; on the seventh the black is a mere spot on one or both webs; the bluish fades into pure white at its juncture with the black on all the feathers except the first. First primary with a subapical spot near the tip, small, rounded, not much more than an inch long, not longer on the outer vane than on the inner, sometimes wanting on the former. Second primary without a white spot, or, if present, it is a mere point. Extreme tips of all the primaries white. Young of the year: Entirely a deep sooty brown, the throat slightly streaked and the rump transversely barred with whitish, and the feathers of the upper parts edged with grayish or yellowish. Wings and tail entirely black; bill black. Length 25 inches; extent 58; wing 17.75; tarsus 2.50 to 2.60.

*Habitat*.—Eastern and Western coasts of North America.

Although it may seem a hazardous undertaking to separate the Herring-gulls of America and Europe, after they have been judged identical by so many authors of repute, I am compelled to do so from a conviction that the differences constantly observable in them are of specific value. Further on it will be attempted to show why they have been confounded.

The comparison of the extensive series of the North American bird has been made with four perfect specimens of *Larus argentatus* from Europe, which, I have every reason to believe, represent typically the characters of that species.

In both birds, the color of the mantle, the color of the bill, the relative proportions of the tarsus and toes, the black on the primaries, the small white apical spots, and their bluish bases do not differ appreciably. The tangible differences are the following:

1st. The whole bird is larger. The difference in the wing in some specimens amounts to nearly two inches, and in none is it less than half an inch.

2d. The bill is larger, longer and more robust. It is especially stouter at the base. The angle is larger, more prominent and bulging; but at the same time it has not so pointed and well defined an apex.

3d. The legs and feet are longer and stouter, perhaps even more so than is proportional to the greater size of the bird. The entire difference in the length of the tarsus and middle toe amounts to but little less than half an inch.

The preceding differences, though marked, I should not consider, in the absence of other distinctive features, as of specific value. The following discrepancies I find it impossible not to regard as conclusive.

4th. In the European bird, when adult, the first primary has a white terminal space just about two inches long. (This is precisely as in *californicus*, the similarity being further heightened by the fact that in young birds there is a narrow transverse bar, which gradually resolves itself into two small spots or scollops, and finally disappears.) The second primary has a rounded white spot about three-fourths of an inch in diameter, invading both vanes, but divided into two by the black shaft. In the American bird the first primary has a rounded white spot (of much the same size and character as that on the second primary of the European bird) entirely distinct and separated from the white apex, which is very small. The second primary has no white sub-terminal spot; or if one is present (which is rarely the case in very old birds) it is exceedingly small.

Now it may be urged, that these differences have been noted, but disregarded as of no value, the nature of the terminal markings on the wings of gulls being considered "notoriously inconstant." There is in the Smithsonian collection perhaps the most extensive series of American Herring gulls ever brought together. In no single specimen of the series have I ever observed the slightest approach to the large white apical space on the first primary which exists in the European bird;—constantly, so far as I have observed. 1862.]



portunities for judging. While the bird is undergoing the changes incident to its arriving at maturity, there are great and indeed endless variations in the precise character of the primaries. All, however, uniformly tend towards the same result; and in fully adult birds *these characters are constant*.

I find no material differences in the character of the extent of the bluish markings of the bases of the primaries.

The above points would seem to be sufficient to establish the position assumed, but there is another argument of a different character which, in connection with the preceding, seems quite conclusive. The Herring Gulls of both continents differ from the *Larus glaucus*, *leucopterus*, etc., in being essentially southern birds. They go north to breed only, returning again as soon as the duties of incubation are concluded, and moreover, do not proceed very far north. The American bird, at least, is found but sparingly, if at all, north of Cape Chidleigh, on the coast of Labrador, and is more numerous somewhat farther south. The *Larus glaucus*, *leucopterus*, *Pagophila eburnea*, etc., are entirely boreal birds, inhabiting the regions about the arctic circle, coming south only when forced to do so by the severity of winter. In view of this fact, it would be improper to presume upon the specific distinction of the two birds, unless very strongly marked and constant characters were found. Reasoning by analogy, it would be natural to suppose that two birds, separated by the breadth of the ocean, might very probably be distinct; and discrepancies which in the case of truly boreal birds would be of little importance, might under other circumstances be of specific value.\*

In view of the above facts, I have not hesitated to separate the two birds. If the position assumed should be hereafter substantiated by more extended investigation, it will be interesting as bearing upon the law which regulates the identity or non-identity of birds of the two continents, which does not appear to be as yet thoroughly understood.

With regard to the previous comparisons which have been instituted between the two birds, in which no differences have been discovered. It seems that this might have arisen in two ways. In the first place, authors who were impressed with the differences of the markings of the primary in the same species at different ages, might have considered these differences in the two species as equally accidental, and consequently entirely overlooked them, considering them as of no value whatever. The birds in other respects are so generally similar, that they might readily be thought identical. Again, when we are informed that absolutely no differences could be discovered, is it not very probable that the European bird was compared with Northern white-tipped-primaries stype, the color of the legs not being apparent in dried skins? For example:—this is certainly the case in the comparison made by Wm. Thompson, Esq. (See "Natural History of Ireland, Birds, vol. iii. page 367, copied from the Proceedings of the Zoological Society of London, for 1835, page 83.) The comparison is here made of "six mature specimens of the Herring-Gull of the north of Ireland" with the description given in the Fauna Boreali-Americana. As Richardson does not particularly mention the character of the bluish markings on the bases of the primaries, and gives the legs as flesh colored, there was no difficulty in referring the European specimens to the description. On account of the difference of size of the subterminal spot on the second primary of the two wings of the same individual, the author infers that "this marking is so inconstant that it should not be relied on as a character." Both spots, however, were present; and I have noticed the same difference in the two wings of *californicus*, and even the presence of a minute white dot on the second primary of one wing of *L. Smithsonianus*, and its absence from that of the other, without considering it as in the least invalidat-

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\* It is due to Prof. Baird to acknowledge that the theory is not original with myself.

ing the claims of these markings to be considered as of value. The radical difference still exists.

But if then the terminal marking of the primaries of *californicus* are like those of the European *argentatus*, and the two species are nearly identical in size and general robustness, what are the differences between these two species? Briefly as follows: The European *argentatus*, though less robust than the *apicalis*, does not exhibit that decided approach to the "new gull" type indicated in the *californicus* by its greenish legs. Though the terminal markings of the primaries are quite identical, the character of the bluish bases differ decidedly. In *californicus* this color is very light, so much so as to be almost white. It runs up further on the primaries (especially on the first), and with a different pattern, its edge being nearly parallel with the shaft for the greater part of its length, and then turning off suddenly at an angle to the edge. It runs up nearly as far on the edge of the feather as in the middle. Now in the European *argentatus* (and also in *Smithsonianus*,) this color is but little lighter than the mantle; runs an oblique course to the edge of the feather; and goes further up centrally than at the edge of the inner vane, where the terminal blackish descends for a little distance as a narrow margin. Moreover, in *californicus* the line of demarcation of the two colors is very distinct and decided, while in *argentatus*, they are more blended at their union. In discussing this point, the habitat of the *californicus* should not be lost sight of.

With regard to the name by which this species is to be designated:—

So far as I have been able to ascertain, the species has never been designated by any other name than that of *L. argentatus* by American authors, it having been always considered by them as identical with the European species of Brünnich.

The *Laroides americanus*, Brehm, might perhaps be considered to refer to this species. It is, however, evidently quite a different bird. The brief diagnosis of Brehm is as follows: "Unterscheidet sich von *Laroides argentatoides* Brehm durch den etwas kleinern Schnabel und der noch weiter hirsten erhöhten scheitel." Now the *Laroides argentatoides* of Brehm is said by that author, "vor allen vorhergehenden"—*L. major*, *argentatus* and *argenteus*—"an ihrem kleinen Schnabel und äusserst hohen scheitel zu erkennen." Thus, the *L. americanus* of Brehm is a bird with a much smaller bill even than *L. argentatoides* of that author, and therefore cannot possibly be the species now under consideration, which has a larger bill than *argentatus*, Brünnich. I regard it as not at all impossible that Brehm should have based his species (*americanus*) on a small specimen of *L. californicus*, but his diagnosis is so brief and unsatisfactory that I do not see how the identity of the two names is to be proved positively.

The *Laroides argentatoides*, Brehm, is given by Bonaparte and some other authors as the "*Larus argentatus ex America*," which would make it the bird now under consideration. Brehm's description, however, gives no tangible points of difference, and the measurements indicate a bird rather smaller instead of larger than the *argentatus*, Brünn. The distinctive characters from *argentatus* are summed up as lying in the smaller size, smaller bill and higher forehead;—features quite at variance with those presented by the species now under consideration. Moreover, the expression "sie ist nördlicher unter allen silbermöven," proves decisively the non-identity of the two. I have been unable to find any other name which could by any possibility be referred to this species.

There is, in the collection of the United States Exploring Expedition, (Vincennes and Peacock,) a Gull labelled as having been obtained in Oregon. The specimen presents the characters of the present species typically, agreeing perfectly with eastern skins. This locality I was at first disposed to consider as erroneous, but very recently specimens received from J. Hepburn, Esq., of 1862.]

San Francisco, collected in that immediate vicinity, would seem to demonstrate the existence of the species on the Pacific as well as on the Atlantic coast. The specimens I have compared critically with an eastern series, and have been unable to detect the slightest difference. They appear to be absolutely identical. A circumstance that would seem to confirm the belief that the present species does extend quite across the continent is the fact that there are undoubted specimens in the collections of Messrs. Kennicott and Ross from localities whose general avi-fauna is rather of a western than of an eastern type. Should the existence of this bird on the Pacific slope be satisfactorily demonstrated, its *habitat* may properly be given as the "Continent of North America."

I beg leave to dedicate this species to that Institution whose material for the illustration of North American ornithology, unequalled in richness and extent, has so greatly increased our knowledge in this department of Natural History. And the name seems not inappropriate, for, as there is scarcely a lake or river in North America which does not furnish sustenance to this Gull at some period of its extensive migrations, so there is hardly a locality, however remote or inaccessible, which has not yielded its varied productions to the Smithsonian Institution, until its collections afford every facility for the study of the Natural History of our Continent.

II. A large white apical space on first primary in adult birds. Legs dusky olivaceous, the webs bright chrome.

9. *LARUS CALIFORNICUS* Lawrence.

*L. argentatoides*, Bp. 1828 et Richardson, 1831; nec Brehm. *L. Californicus*, Lawr. 1854 et 1858. *Laroides Calif.* Bp. 1856.

*Sp. char.*—Bill moderately stout and strong, the angle well developed; varying considerably in size, larger than in *Delawarensis*, sometimes nearly equalling *argentatus*. Tarsus equal to or slightly longer than the middle toe and claw. Adult: Bill chrome yellow, tinge with greenish, a vermillion spot on the lower mandible at angle; a black spot just above it, forming with another small black spot, sometimes present on the upper mandible, an imperfect band. Legs olivaceous greenish or yellowish, the webs chrome. Mantle pearl blue, much as in *brachyrhynchus*, lighter than in *canus* (Linn.), perhaps a little darker than in *argentatus*. Primaries: bases of all light bluish white, almost white internally, especially on the outer; and of great extent on all the primaries; first with a white space at the end about two inches long, the shaft white along the white portion of the feather; second with a white spot near the end, on the whole of the inner and most of the outer web, divided by the black shaft; tips of all white; black forming merely a narrow subterminal band on the sixth. Tips of inner primaries, of the secondaries and tertiaries, white. Dimensions, (average, for they vary greatly) wing 15.50; bill nearly 2.00; tarsus 2.30. Female smaller.

*Habitat.*—California; Pacific coast; Arctic America, internally; breeds about Great Slave Lake.

The following is the argument in favor of the synonymy adduced:

In the first place, *argentatoides* of Bonaparte's Synopsis (1828), and of Richardson (1831), are the same bird, since the latter quotes the former as authority for the name, and the diagnosis and descriptions of the two agree perfectly. Now, in the collection there are numerous specimens of the fully adult bird from Arctic America, from localities not far distant from those where Richardson's specimens were procured. These specimens agree precisely with Richardson's descriptions of *argentatoides*,\* and correspond very

\* If it be objected that the expression "six outer quills crossed by a brownish black bar, which takes in nearly the whole of the first one" is not correct, I refer to several other descriptions of Richardson, (his *canus* and others,) where it is evident that he does

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nearly with the measurements.\* I think, then, that there can be no reasonable doubt of the propriety of referring the large northern specimens to the *argentatoides* of Richardson and Bonaparte. These same specimens were, immediately upon their reception, referred unhesitatingly to *Californicus* of Lawrence, by both Prof. Baird and myself. We have critically examined them, and find it impossible to distinguish them from undoubted specimens of *Californicus*.

The size is somewhat greater; but not more so than would be expected from the much more northern habitat of the specimens examined; and, moreover, the numerous specimens differ among themselves to a remarkable degree, the smallest of the northern ones not exceeding the largest of the southern. Thus, though a large northern bird and a small southern differ so much that it would seem quite reasonable to separate them, there are found intermediates of every grade of dimensions. The upper parts of the northern bird are, perhaps, a shade lighter than are California specimens; but otherwise, we cannot appreciate the slightest distinctive characters. Now, it is not improbable that there should be in America two species of white-tipped primaried Gulls, the one from Arctic (and Eastern?) America and the other from the Pacific, differing from each other, on an average, in size; but in the absence of tangible characters, I do not venture to separate the two. I therefore, at present, quote "*Larus argentatoides*, Bp. et Rich. nec Brehm" as synonymous with "*Californicus*, Lawr.," leaving it to future investigation to settle the point definitely.

The only discrepancy to be reconciled in the description of Richardson, is the statement "legs flesh-colored." The legs of *Californicus* are of a dusky olivaceous greenish or yellowish, their interdigital membranes bright chrome yellow, with a slight tinge of green. In this respect, as well as in a general less powerful and robust organization, weaker bill, &c., it shows an evident approach to the "Mew-Gulls" (*Delawarensis*, *canus*, &c.), and apparently forms the connecting-link between the powerful Herring-Gulls, with their robust bills and flesh-colored legs, and the group of which *canus* is the type.† But Mr. Lawrence himself, in his description given in the General Report, says also "legs flesh-colored," though the color is given correctly in the Ann. N. Y. Lyc. N. H. The descriptions of both these authors were most probably drawn up from the dried skins, in which, as attested by a large series before me, the legs appear of a dingy undefinable color, which might readily be supposed to be the change produced in drying of the flesh color. My authority for the statement as to the color of the legs, is the labels attached to the specimens, containing the color of bills, eyes, legs, &c., taken from the recent bird before skinning.

The type of *Californicus* has been kindly furnished by Mr. Lawrence for examination. It is moulting, and some of the primaries are not fully grown out. The white apical space on the first primary is interrupted by a narrow transverse bar of black. Another specimen before me is in precisely the same condition. In other skins of the series the black bar is resolved into

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not take into special consideration the character of the extent of the bluish white bases of the quills; and since the black nearly occupies the whole of the outer web of the first, he would not have particularly noticed the extent to which the bluish white runs up on the inner vane.

\* I am inclined to think that Richardson drew up his measurements and descriptions from the largest as well as the most perfect specimens, since, in several instances, the measurements seem above the average, though not exceeding the dimensions of large individuals.

† Bonaparte (Syn., 1828, 360) says his *argentatoides* is "common near New York and Philadelphia."

‡ This fact is also an argument for the impropriety of separating the two groups generically, as has been done by some authors.

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two little spots, then into a slight indentation at the edge of the feather, which finally disappears altogether, leaving the apex of the first primary purely and uninterruptedly white for nearly two inches.

Independently of the difference in size, character of bill and color of legs, the present species may readily be distinguished from the American Herring-Gull by the different markings of the primaries, (compare descriptions.)

If it be an error to refer the *argentatoides* of Richardson to the *Californicus*, or, in other words, if there be a true Herring-Gull in the north with flesh-colored legs, I do not know by what characters it could be separated from the true European *argentatus*. (See comparison of *Californicus* and *argentatus*, under head of *L. Smithsonianus*.)

The name *argentatoides* of Bonaparte and Richardson is of course of prior date to *Californicus* of Lawrence. The latter name, however, obtains, of Brehm's having first applied the name *argentatoides* to a variety, perhaps only accidental, of the European *argentatus*, of which it necessarily becomes a synonym.

Brehm's description of his *argentatoides* applies pretty well to *Californicus*, but it is evident that it cannot refer to the latter, for he says of it, that "brutet an der scheve dischen, Norwegischen und Danischen kaste,"—a statement entirely at variance with all that is at present known of the geographical distribution of *Californicus*.

Bonaparte, in his *conspectus* (1856), under head of *L. argentatoides*, (referring to his *Synopsis* of 1828,) gives, among other characters, the smaller size, the tarsus only two inches, "*remigibus nigris, apice, primæ latissimo, albis*." This is precisely the character of *Californicus*. The tarsus of *L. Smithsonianus* is nearly or quite two and a half inches long; that of *L. argentatus* about two and a quarter; while that of *Californicus* is just about two inches.

b. Smaller; bill less robust; angle less prominent; legs dusky bluish green. "Mew-Gulls." (Including *L. canus*, the type of Linnæus' *Larus*.)

#### 10. *LARUS DELAWARENSIS* Ord.

*Larus Delawarensis*, Ord, 1815; Lawr. 1858, (excl. *synon. aliq.*) *L. canus*, Bonap. *Syn.* 1828; (nec Linn.; nec Richards.; nec Nutt.) *L. zonorhynchus*, Richardson, 1831; Aud. 1842 (excl. *synon.*), Bp. 1856 (excl. *synon.*) *Glaucus zonorh.* Bruch, 1853. *Gavina zonorh.* 1855.

*Sp. char.*—Bill encircled with black near the end. Tarsus a fourth longer than the middle toe. Mantle light pearl blue. Spot on the outer primaries small, not larger on the outer than on the inner web. In winter the head and neck spotted (not streaked nor nebulated) with dusky. Length 19.75 inches; extent 48.50; wing 14.75. Bill above 1.70; gape 2.30; tarsus 2.05; toe 1.80.

*Habitat.*—North America, generally. Puget's Sound. All along the Atlantic coast. Texas and interior.

It is necessary to exclude the synonyms of many of the authors adduced, since most of them quote *canus* and *brachyrhynchus* of Richardson as the young. (See next species.)

#### 11. *LARUS BRACHYRHYNCHUS* Richardson.

?*Larus niveus*, Pall. 1811. *Larus canus*, Richardson, 1831, ad (nec Bp. *Syn.* 1828; nec Linn. et auct.), Nuttall, 1834. *Larus brachyrhynchus*, Richardson, 1831, juv. *Larus Suckleyi*, Lawrence, 1858. *Rissa (!) septentrionalis*, Lawrence, 1858.

*Sp. char.*—Bill small, somewhat stout for its length, much shorter than the head or tarsus. Upper mandible straight to the end of the nostrils, moderately convex to the tip, rather more so than in *canus*. Angle comparatively more developed than in *canus*, the lower outline considerably concave posterior to

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it, somewhat so before it. Commissure about straight to near the tip. Tarsus about equal to middle toe and claw. Adult: Bill bluish green, its terminal third bright yellow. Legs and feet dusky bluish green, the webs yellowish. Mantle light grayish blue, or dark pearl blue; a shade lighter than in *canus*, much darker than in *Delawarensis*. Primaries: The bluish gray bases rather lighter than in *canus*, much darker than in *Delawarensis*, but fading into nearly pure white on all but the first, at its juncture with the black portion. These bluish gray bases extend towards the end much further than in *canus*, as far as in *Delawarensis*; and, as in that species, extend on the second, third and fourth feather further along the centre of the feather than on the edges, so that they are bordered for some distance with the black of the terminal portions. The black takes in the outer web of the first primary, and nearly the whole of the inner, but rapidly becomes narrower, till on the sixth it is merely a subterminal transverse bar; the seventh has frequently a spot of black on one or both webs; first, with a large white spot near the end, two inches long, longer on the outer than on the inner web, not divided by the black shaft: the tip of the feather black; second, with a similar spot, but smaller, not longer on the outer than on the inner web, and divided by the black shaft; the extreme tip white, as are the apices of all the others except the first. Dimensions: Length 17.50; extent 40.00; wing 13.75. Bill above 1.40; along gape 2.00; height at nostril and at angle .35; tarsus and middle toe and claw 1.80.

*Habitat*.—Interior of Arctic America. North Pacific Coast.

I have before me the type specimen of Richardson's *Larus brachyrhynchus*, the original of this description in the Fauna Boreali-Americana, "a female, killed on the 23d of May, 1826, at Great Bear Lake." "Some brown markings on the tertiaries, primary coverts, and bastard wing, with an imperfect subterminal bar on the tail, point it out as a young bird, most probably just commencing its second spring. The rest of its plumage corresponds with that of *L. zonorhynchus*, except that it wants the extreme white tips of the quill feathers." The specimen is labelled "♀, May 23, 1826, Great Bear Lake," and corresponds minutely with the above description. Richardson, however, in drawing up the description from the young bird, fell into the error of giving "*remigibus apice concoloribus*," whereas, in the adults, the primaries are as broadly tipped with white as in *Delawarensis* or *canus*. In the type the bill is very short, perhaps less than in the average of even young birds; but there are specimens before me in which it is quite as short.

A very careful comparison of the types of *Larus Suckleyi* and *Rissa septentrionalis* with the above specimen, and with the very extensive series of all ages in the collection, shows them to be absolutely identical, and proves that the three names refer to one and the same species.

The rather intricate discussion of the relationships of *Larus niveus*, Pallas, is presented elsewhere. The amount of the other synonyms may be stated in a word. There are in North America two species of "Mew-Gulls." One is the *Delawarensis*, Ord., *zonorhynchus*, Richd. The other is a bird, the adult of which Richardson mistook for the European *canus*, Linn. and so named it, the young of which he characterized as *L. brachyrhynchus*. The error of authors is in not recognizing two species, but considering *canus*, Rich., and *brachyrhynchus*, Rich., as intermediate ages, or varieties of *zonorhynchus*, Rich. As the name of *canus* is pre-occupied, *brachyrhynchus*, though based upon the young bird, must stand for the North American species.

*Comparison of L. canus*, Linn., of Europe, and *L. brachyrhynchus*, Rich., of America.—Common characters: Small weak bills, without strongly developed angle, or black band; color of back nearly the same, subterminal and apical spots of primaries identical. Distinctive characters: *brachyrhynchus* has the bill shorter and smaller, culmen more convex at the end, the angle perhaps comparatively more developed. Size is less, gull blue, a little 1862.]

lighter. Bases of primaries very different, the blue is much lighter, fades into nearly white at its juncture with the black; extends for a greater distance, and runs up further in the centre than along the edges of the inner vane; tarsus about equal to the middle toe and claw, while in *canus* the tarsus is a fourth longer, as in *Delawarensis*. The collections of Messrs. Kennicott and Ross would seem to indicate that this gull is extremely abundant in the interior of Arctic America.

Genus II. *BLASIPUS* Bonaparte.

*Blasipus*, Bp., 1852, fide Lawr. Bp., 1856, type *Larus Heermanni*, Cass.  
*Adelarus*, Bruch, 1853. Id., 1855, p.

12. *BLASIPUS HEERMANI*, Bon. ex Cass.

? *Larus Belcheri*, Vig., 1829. ? *Lencophacus Belcheri*, Bp., 1856; (nec "*Adelarus Belcheri*, Vig.; *fuliginosus* Gould" Bruch, 1853 et 1855).  
*Larus Heermanni*, Cass., 1852. *Blasipus Heerm.*, Bp., 1856; Lawr., 1858.  
*Adelarus Heerm.* Bruch, 1853, et 1855, excl. synon.

*Sp. Char.*—Bill bright vermillion, black from angle to tip. Head all round white, gradually merging on the neck to a plumbeous ash, which extends over the whole under parts (considerably lighter on the abdomen and under tail coverts,) and also on the rump, but which on the back and wings deepens into a plumbeous slate color. Tips of secondaries and tertiaries broadly white. Primaries black, the tips of all but the three outer ones white. Tail black, narrowly tipped with white. "Length about 17·50 inches; wings 13·50; tail 5·50."

*Habitat.*—Pacific Coast of North America; Puget's Sound; California; Mazatlan, Mex.

Genus III. *RISSA* Leach.

*Larus*, Linnæus, 1758, (nec 1744, nec 1735, fide Gray.)  
*Gavia*, Boie, 1822, (nec Moehr. 1752.)  
*Rissa*, Leach, 1825, (typus *Larus rissa*, Brünn.)  
*Cheimonea*, Kaup, 1829, (typus idem.)  
*Pulocondora* Reichenbach, fide Bp.

13. *RISSA TRIDACTYLA* Bon. ex Linn.

*Larus rissa* Brünn, 1764. *L. tridactylus* et *rissa*, Linn. 1766. *L. torquatus*,  
*L. gavia*, et *L. canus*, Pall., 1811. *Rissa Brünnichii*, Leach, 1825.  
*R. cinerea*, Eyton. *R. tridactyla*, Bon., 1838, et auct. *Gavia tridactyla*,  
Boie, 1822. *Cheimonea tridactyla*, Kaup, 1829.

*Sp. Char.*—Bill rather longer than the tarsus, nearly equal to the middle toe without the claw, stout at the base, tapering somewhat towards the tip, which is rather acute and attenuated. Convexity of culmen regular and gradual. Angle at symphysis very moderately developed. Color of bill light yellow, clouded with olivaceous. Head and neck all round, under parts and tail pure white. Mantle rather dark bluish or cinereous gray, the tertiaries and secondaries of the same color nearly to their tips, which are white. Primaries: the first very light bluish white, without white apex, its outer web and its inner web for about two inches from the tip black; second like the first, but without the black outer web, its tip being black for nearly the same distance as the first, its apex with a minute white spot; on the third and fourth the black tips grow shorter, while the apices are more broadly white; this lessening of the black on each feather is exactly proportional to the shortening of the successive quills, causing the bases of all the black tips to be in the same straight line. A subapical black spot is usually present on one or both webs, but is sometimes absent. Legs and feet dusky olive. Young: Bill black. An anteocular lunula, and a postocular spot, dusky

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slate. A broad transverse bar across the neck behind, the whole of the lesser and median wing coverts, the bastard quills, the tertiaries, except at their edges, and a terminal bar on the tail, black. The four outer primaries with their outer webs, outer half of inner webs, and tips for some distance black, the rest of the feather pearly white. Tips only of the fifth and sixth black, their extreme apices with a white speck. Dimensions: Wing 12.25. Bill above 1.40 to 1.50, height at base .59, at angle .40; tarsus 1.30 middle toe, and claw 1.80.

*Habitat*.—Arctic regions of both hemispheres, coming south in winter.

A specimen has the circumrostral space as far back as the eyes a light brownish ashy, in marked contrast to the adjoining white. The bill is stouter than usual, and of a bright chrome.

A comparison of this species with the succeeding will be found under the head of the latter.

14. *RISSA KOTZEBUI* BON.

?*R. brachyrhyncha*, Bruch, 1853, nec *Larus brachyrh.* Gould. *R. nivea* Bruch, 1855, excl. synonym. *R. Kotzebui*, Bp., 1856. *R. brevirostris*, "Brandt," Lawrence, partim, sed nec Brandt, quæ potius species sequens.

*Sp. Char.*—Nearly adult. Bill rather long, and somewhat tapering towards the tip, which is attenuated and decurved; stout at the base, where it is much deeper than at the angle; culmen about straight to the nostrils, the convexity beyond them to the tip very gradual and rather slight; gonys doubly slightly concave, the angle but little developed, so as to hardly touch a chord drawn from the tip of the lower mandible to the base; but its apex acute. Bill light yellow, slightly tinged with olivaceous, its tip somewhat clouded with dusky. The specimen described, as being not fully mature, has a post-ocular spot, and the nape plumbeous gray, which color on the back of the neck fades into the pure white which intervenes between it and the mantle. Mantle gray-blue, with a leaden tinge, but several shades lighter than in *brachyrhynchus*. This color extends nearly to the tips of the tertiaries, but hardly at all invades the secondaries, which are pearly white for nearly the whole length. Primaries: The shafts of all black, deepest on the outer ones; the first blackish-brown, its inner web dull white at the base, this white narrowing as it ascends till it is lost an inch or two from the tip of the feather; there is no distinct line of demarcation between the two colors; second the color of the first, but the white broader, better defined, and ending abruptly one and a half inches from the tip; third and fourth with the white still wider defined, and running up rather further on the feather; fifth bluish white, with a brownish black tip, half an inch long and a central field of dusky along the shaft; other primaries a lighter shade of the color of the back, fading into white on the edges, without any black. An imperfect subterminal bar on the tail, and dusky tips along the median wing coverts, show the specimen to be immature. Tarsus shorter than the middle toe without the claw; the hind toe better formed than in *R. tridactyla*. Legs and feet dusky-olivaceous. (No. 21,287, S. I. Coll., from Semiavine Straits.)

Another specimen (No. 15,695, from the N. W. coast of America) differs in the following particulars:

The bill, though stout at the base, is more tapering and attenuated at the tip, which is more decurved; and the convexity of the culmen is more gradual, giving a somewhat different shape. The back is a rather darker shade of leaden gray, approximating to *R. brachyrhyncha*. The white of the inner vanes of the outer primaries is broader, purer and more sharply defined. It agrees precisely in other particulars, the hind toe having the same development. Dimensions (of No. 21,287): Bill along culmen 1.50 inches; from apex of angle to



tip of lower mandible .48; from nostrils to tip of upper mandible .72; depth at base .55, at angle .42; width at base .33. Wing just 12 inches; tarsus 1.35; toe and claw 1.90. Of No. 15,695, the same parts measure respectively, 1.68, .56, .90, .54, .40, .40; wing, tarsus and toe about the same.

*Habitat*.—Northwest coast of America.

This species differs from the *R. tridactyla* chiefly in the shape of the bill and in the greater development of the hind toe. Its habitat is also quite different, and I have not the slightest doubt of the propriety of separating that species. From the *R. brachyrhyncha*, Gould, of which I have before me typical specimens, fully mature and in excellent preservation, it is totally distinct, the characters differing in almost every respect. The size, shape and color of the bill, the color of the mantle, the color of the feet and the markings of the primaries are widely diverse in the two birds. It is unnecessary here to specify these differences, as they may be seen by comparing the descriptions given.

While the characters of the species are thus so very distinct and well marked, its synonymy is in a state of confusion only equalled, perhaps, by that of the succeeding species; and the proper name to be applied to it is a matter of great uncertainty. The history of its synonyms is so intimately blended with that of *Rissa brachyrhyncha*, that the two may be most conveniently discussed together. The reasons for the adoption of the name which I chose for this species may, however, be given here. The essential character of Bonaparte's *R. Kotzebui* is "simillima præcedenti;" *R. tridactyla*, "sed halluce magis ex plicato." The character of the hind toe is precisely the distinctive feature of the specimen now under consideration. Still there are some discrepancies in Bonaparte's description. The wings of the young birds before me are not "black internally;" the bill is not "very black," nor is the back "remarkably variegated with black and white." Still, in a more immature state of plumage than that exhibited by the specimens before me, these characters may exist; and therefore, in spite of these discrepancies, I think it advisable to adopt the name, especially as the imposition of a new one, otherwise unavoidable, is thereby obviated. It is well known that at certain ages the *R. tridactyla* assumes exactly the state of plumage described by Bonaparte: and reasoning by analogy, in view of the close relationship of the two, it might be expected that the same should occur in the present species.

15. *RISSA BRACHYRHYNCHA* (Gould.)

*Larus brachyrhynchus*, Gould, P. Z. S. 1843. *Rissa nivea*, Gr. secundum Bp.; (nec *L. niveus*, Pall. *Rissa brevirostris*, Brandt, secundum Bp. *Rissa nivea*, "Bruch," Lawrence, (1858,) Gen. Rep. 855; sed nec Bruchii, quæ species præcedens. Descriptio Gouldii ipsius transcripta est.

*Sp. char.*—Adult: Bill a uniform clear light straw yellow, without any olivaceous tinge; very short, stout, wide at the base, upper mandible much curved, though not acute nor attenuated; the convexity of the culmen very great, especially towards the tip, it being, from the nostrils to the tip, almost the arc of a circle, whose centre is the apex of the angle at the symphysis; gonys but very slightly doubly concave, its angle but little developed. Tarsus not much more than two-thirds the middle toe and claw. Wings exceedingly long, reaching much beyond the tail. Head and neck all round, under parts and tail pure white. Mantle deep leaden gray, much darker than in the preceding; and this color extending to within half an inch of the tips of the secondaries and tertials, which are white. Primaries: First primary with its shaft and outer vane black, its inner vane with a space of dull gray (not white), which, at the base, takes in nearly all the vane, but gradually narrows, and, at about two and a half inches from the tip, ends by a well-defined rounded termination about half as broad as the vane itself; second, the outer vane is of the same leaden gray to within four inches of the tip; the inner

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vane wholly of a lighter shade of the same color to within three inches; this gray ends very abruptly, being almost truncated, as it were; third, like the second, but the gray extends further (nearly as far as the outer as on the inner web), to within about two inches of the tip, which has a minute gray apical spot; fourth, wholly leaden gray to within one and a half inches of the tip, which has a larger apical spot than the second; fifth, the leaden gray body of the feathers is separated from the well-defined and now white apex by a band of black, less than an inch long; and the gray begins to be edged internally with white; sixth, gray, fading into white at the tip and internal border, with a small subapical spot of black on one or both webs; other primaries like the sixth, without any black. This "gray" of the primaries is precisely the color of the mantle. Legs and feet in the dried specimen light straw yellow; probably tinged with coral red in life. Claws black. Dimensions: Bill along culmen 1.19 inches; depth at base .50; width .42; depth at angle same; nostril to tip .60. Wing 13.00; tarsus 1.25; middle toe and claw 1.95. (No. 24,296, S. I. Coll. from Kamtschatka.)

*Habitat*.—Kamtschatka.

This is a very strongly-marked species, and one which it is impossible to confound with any other. The fine specimens before me agree in the minutest particulars with Gould's description. Its peculiar characters of the shape of the bill, its color and that of the feet, with the dark mantle and the peculiar style of the markings of the primaries, separate it widely from any other Gull with which I am acquainted. Having never seen the young bird, I am totally unacquainted with the changes of plumage which the species undergoes.

Having thus characterized the two species of *Rissa* from the Northwest coast, I proceed to the difficult task of discussing their intricate synonyms. While it is believed that the characters of the species are accurately given, the hope is scarcely indulged that the synonyms are more correctly assigned than they have hitherto been by previous authors.

Concerning the proper location of no name has there been a greater difference of opinion among authors than of *Larus niveus* of Pallas? Many writers consider it a *Rissa*, and refer it to the *R. brachyrhyncha* of Gould. Bonaparte considers it a true *Larus*, and makes it a distinct species. I am decidedly of opinion that it is a true *Larus*, and very closely allied to, if, indeed, not identical with, the *Larus brachyrhynchus*, Richardson, of this paper. Let us examine the characters given by Pallas. "Rostrum virescente-flavum." There is no trace of greenish in the bill of *Rissa brachyrhyncha*, which is a clear straw yellow. "Pedes fuscii." The feet of *Rissa brachyrhyncha* are yellow, with a tinge of coral red. With his known accuracy of description, Pallas could hardly have made such a mistake as this; and hence, I do not see why Bruch has identified the bird with *Rissa brachyrhyncha*. In Pallas' description thus far, there is nothing absolutely inconsistent with the characters of *C. Kotzebui* of this paper. The description continues, however, "apice alarum nigro præcedenti similimus." The preceding species is *L. cachinnans*, Pall., the description of the primaries of which is, "remiges 1 ad 6 extremitate nigræ, extimæ sensim ulterius; duæ extimæ macula transversa alba et apice, 3 ad 6 tantum apice albæ." This is the usual pattern of coloration of the primaries of Herring-Gulls, and very different from that which obtains throughout the genus *Rissa*, being equally inapplicable to either species of the genus. It is true that the plate gives no indication of these subapical spots on the primaries; but in the case of conflict, the text should certainly have precedence. Is the bird, then, a *Rissa*? If we examine Pallas' descriptions of his *Larus rissa*, *L. torquatus*, or *L. gavia*, we find that he is very careful to use the expressions "tridactylus" and "subtridactylus," and it seems hardly probable that the rudimental character of the hind toe would have passed unnoticed. The plate shows the hind toe and claw as fully formed as many species of *Larus*, and there is no expression in the text contradicting it. While I am thus of opinion that the 1862.]

bird is a *Larus*, I by no means insist upon its reference to *L. brachyrhynchus*, Rich., although I have placed it as a synonym of that species, with a query, in consequence of my inability to discover any material discrepancies. The question appears really to hinge upon the identity or non-identity of *Larus brachyrhynchus* with the Siberian type of *L. canus*, which is given by Midden-dorff as a variety (*major*) of *canus*, in view of its larger bill and some other peculiarities. I have little doubt of the propriety of referring *L. niveus* to this Siberian Mew-Gull.

But, while I thus exclude *Larus niveus* of Pallas from the *Rissa*, the *Rissa nivea* of Bruch and other authors is to be examined. Bruch says of his *R. nivea* of 1855, that it has the hind toe better developed; and it is of another species that he says "feet coral-red." While, therefore, he is in error in adducing *R. brachyrhyncha*, Gould, as a synonym, his species is to be referred (from its description) to the preceding species,—*R. Kotzebui*.

I quote *Rissa nivea*, Gr. and *Rissa brevirostris*, Brandt, as synonyms of the species, on the authority of Bonaparte.

In the General Report on Birds, Mr. Lawrence gives, under the head of *Rissa brevirostris*, Brandt, a description taken from Bruch, which applies to the preceding species in most particulars, but the expression, "feet coral-red," is only applicable to the present. Again, under head of *Rissa nivea*, Bruch, which has been shown above to be the *Kotzebui*, he copies Gould's description of *R. brachyrhyncha*. In other words, in his first species he has the synonymy of the present and mostly the description of the preceding species; and his second, the description of the present species and mostly the synonymy of the preceding. *Rissa septentrionalis* of Lawrence has been already adverted to.

I am entirely ignorant of the characters and relationships of *Larus citrirostris*, Schimper. By Bonaparte it is placed as a synonym of *Rissa brachyrhyncha*; this author, perhaps, having overlooked the fact that he had already assigned it, a few pages previously, to *L. niveus*, Pallas. Judging, however, from Bruch's description and plate, it must be quite distinct from the present species, as the bills differ widely in shape. Bruch says that Bonaparte's *L. kamtschatchensis* is an "undoubted synonym" of *Larus citrirostris*. Bonaparte himself places *L. kamtschatchensis* as a partial synonym of *L. niveus*, Pall. It is not impossible, after all, that *L. niveus* should be distinct from the Mew-Gulls (*Larus canus major*, Midd. and *L. brachyrhynchus*, Rich.) both of Siberia and America, and yet be no *Rissa*, but form a good species, with *Larus kamtschatchensis*, Bp. and *L. citrirostris*, Schimper, as synonyms. This is the opinion maintained by Bonaparte.

In the preceding remarks I have endeavored to state the opinions of various writers and my own, as fairly as possible; considering that in this manner truth is most likely to be attained. I do not profess to have settled so knotty a point satisfactorily, even to myself; and, accordingly, am prepared to adopt any modifications of the views here expressed which future investigations may require.

#### Genus IV. PAGOPHILA Kaup.

*Gavia*, Boie, 1822; (nec Moehr. 1752.)  
*Pagophila*, Kaup, 1829, (typus *Larus eburneus*.)  
*Cetoparactes*, Macgill. 1842, (typus idem.)

#### 16. PAGOPHILA EBURNEA Kaup ex Gmel.

*Larus eburneus*, Gmel. 1788. *Gavia eburnea*, Boie, 1822. *Pagophila eburnea*, Kaup, 1829; Lawr. 1858. *Cetoparactes eburnea*, Macgill. 1842. *Larus candidus*, Fabricius, 1780. *Larus niveus*, Mart. fide Bp.; (nec Pall. 1811.)

*Sp. char.*—Culmen straight to the nostrils, then regularly convex; commissure gently curved to the tip, where it is greatly decurved; gonys straight to

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near the angle, which is well developed, the outline from angle to tip perfectly straight. Feathers extending between the rami nearly to the angle. Wings long and pointed, reaching beyond the tail; primaries gradually attenuated to the tip. Adult: Entirely pure white, the shafts of the primaries straw yellow. Bill dusky greenish yellow at tip, and along the cutting edges. Legs and feet black. Length 19.50 inches; wing 13.25; bill above 1.40, along gape 2.10, height at nostrils .45; tarsus about 1.45 (varying); middle toe and claw 1.75.

*Habitat*.—Northern coasts of both continents.

17. *PAGOPHILA BRACHYTARSUS* Bruch ex Hölb.

*Larus brachytarsus*, Hölb. 1846. *Pagophila brach.* Bruch, 1855. *P. brachytarsi*, Lawr. 1858. *Larus niveus*, Brehm, fide Bp.; (nec Pall. 1811.) *Pagophila niveus*, Bp. 1856.

*Sp. char.*—"Bill yellow, with a darker tip. The long wings, which when folded reach two and a half inches beyond the tail, are distinguished from those of all other Gulls by the extraordinary breadth of the four first primaries. Color snow-white, with or without dark brown spots. Feet and webs black, the latter very deeply excised. Length 17 inches; extent 40; tail 5; tarsus one inch; middle toe 1.75. Breadth of outer primary four inches from tip 1.23."

*Habitat*.—"Greenland."

Never having seen a specimen of this supposed species, I have nothing to offer with regard to its relationships to the *P. eburnea*. The description is compiled from Holböll's original account.

Genus V. *CHROICOCEPHALUS* Eyton.

*Xema*, Boie, 1822; (nec Leach, 1818.)

*Gavia*, Kaup, 1829; (typus *L. ridibundus*; nec Moehr. 1752.)

*Ichthyaëtus*, Kaup, 1829; (t. *L. ichthyaëtus*, Pall.)

*Hydrocoloeus*, Kaup, 1829; (t. *L. minutus*, Pall.)

*Chroicocephalus*, Eyton, 1836; (t. *L. capistratus*, Temm. fide Gray.)

*Gavia*, Macgill. 1842, p. (Nec Moehr. 1752.)

*Atricilla*, Bonap. 1854; (t. *Atricilla Catesbyi*, Bp.)

*Cirrhocephalus*, Bruch, 1855; (t. *L. cirrhocephalus*, Vieill.)

A.—Large; bill rather stout, tip much decurved; middle toe and claw three-fourths the tarsus.

18. *CHROICOCEPHALUS ATRICILLA* Lawr. ex Linn.

*Larus atricilla*, Linn. 1766. *L. ridibundus*, Wils.; (nec Linn.) *L. major*, Catesb. *Atricilla Catesbyi*, Bonap. (fide Bruch.) *Chroico. atricilla*, Lawr. 1858.

*Sp. char.*—Bill deep carmine. Hood deep plumbeous, grayish black, extending further on the throat than on the nape. Eyelids white posteriorly. Mantle grayish plumbeous. Length 16.50 inches; wing 13; bill above 1.75; tarsus 2.00; middle toe and claw 1.50.

*Habitat*.—More southern portions of Atlantic coast of North America. Texas.

B.—Medium; tarsus equal to the middle toe and claw.

19. *CHROICOCEPHALUS CUCULLATUS* Bruch ex Licht.

*Larus pipixean*, Wagler. *L. melanorhynchus*, Temm. fide Bruch. *Chroicocephalus cucullatus*, Bruch, 1855; Lawr. 1858.

*Sp. char.*—Bill very short, scarcely more than two-thirds the head, about three-fourths the tarsus, moderately stout, the culmen regularly curved from base to tip; angle well defined and very prominent. Adult: hood deep plumbeous black, barely encircling the head, not extending further on the throat than on the nape. Lower eyelid white, upper more broadly so, the white extending behind the eye. Mantle bluish plumbeous, as in *Franklinii*, with more blue than in *atricilla*. Primaries: Shafts of three outer black, of the inner 1862.]

light colored; first, outer web wholly black, inner a rather lighter ashy than the black to within about three inches from the tip; second, like the first, but the base of the outer web the color of the inner; on the third, fourth and fifth the black gradually decreases in extent, till on the sixth it is merely a narrow, subterminal bar; the tips of all are white, smallest on the first, increasing successively on the others. Three lateral tail-feathers white, the others light pearl blue, deepest on the central. Bill deep carmine, crossed with black near the end, the extreme tip yellowish. Legs and feet red. Wing 11·25; bill above 1·20; along gape 1·70; tarsus or middle toe and claw 1·50.

*Habitat*.—Central America; Panama, (Suckley); Louisiana, (Wurde mann.)

Closely allied to *Ch. Franklinii* and much resembling it. Easily to be distinguished by the characters of the primaries, as will be seen by comparing the descriptions given.

20. *CHROICOCEPHALUS FRANKLINII* Bruch ex Richardson.

*Larus Franklinii*, Richard. 1831. *Chroicocephalus Franklinii*, Bruch, 1855.

*Sp. Char*.—Bill comparatively longer and slenderer than in *cucullatus*, the tip more attenuated and decurved. The angle well defined and acute; but the depression of the tip makes it less prominent, gonys from angle to tip concave. Adult: Mouth and bill bright carmine, the latter crossed with black near the end. Feet dusky carmine. Edges of eyelids orange. A conspicuous white patch above and below the eye, and behind it. Hood deep plumbeous black, encircling the upper part of the neck as well as the head, and extending much further on the throat than nape. Mantle as in *cucullatus*. Primaries: Shaft of first white, of others white except along the black portions of the feathers; first, its outer web black to within an inch of the end, its inner pearly white, crossed by a black bar near the end, the tip white for almost an inch; next five crossed by a black bar near the end, two inches wide near the end, gradually narrowing to a black spot on the sixth; bases of all the color of the back fading into white along the outer edge of the inner vane and adjoining black portions; tips of all white. Tail feathers as in *cucullatus*. Length 14 inches, extent 35, wing 11·25. Bill above 1·25, gape 1·75, tarsus or middle toe and claw 1·60.

*Habitat*.—Interior of Arctic America; Nebraska; Texas; Mexico.

21. *CHROICOCEPHALUS PHILADELPHIA* Lawrence ex Ord.

*Sterna Philadelphia*, Ord, 1815. *Chroicocephalus Philada.*, Lawrence, 1858.

*Larus capistratus*, Bonap., 1828. *L. Bonapartei*, Richardson, 1831.

*Chroicocephalus Bonapartei*, Bruch, 1855.

*Sp. Char*.—Bill shorter than the head or tarsus, much compressed, slender, and sternine. Both mandibles with a slight but distinct notch near the tip. Nostrils linear, exceedingly narrow. Adult: Bill black; mouth carmine; legs and feet chrome, tinged with vermillion. Webs bright coral red. Hood plumbeous slate, not so deep as in *Franklinii*, enveloping the head and upper part of the neck, reaching further before than behind. White patches on eyelids narrow. Mantle pearl blue, much lighter than in *Franklinii* or *cucullatus*, not so light as in *minutus*. Ends of the tertials and scapulars scarcely lighter than the back. Primaries: Shafts of the first five or six white except at their extreme tips, the others dark colored; first, outer web and extreme tip black, rest white; second, white, its tips black for a greater distance than the first, and on one or both webs, for a greater or less distance (sometimes half way down the feather) narrowly bordered with black; third, fourth, fifth, sixth, black at the ends for about the same distance on each, the black bordering the inner web much further than the outer; the inner webs of the third and fourth, and both webs of the fifth and sixth, of a rather lighter shade of the color of the back. Other primaries like the back, the seventh and eighth with a touch of black on one or both webs. Length 14 inches, extent 32, wing 10·25. Bill above 1·20, gape 1·75, tarsus or middle toe and claw 1·40.

*Habitat*.—Entire continent of North America.

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Does the female of this species have a brown head? I am inclined to the contrary opinion. If Audubon's assertion to the fact of having seen Gulls with brown heads be true, they were probably of a different species.

[All the preceding species of *Chroicocephalus* acquire during the breeding season, a beautiful delicate rosy blush on the white of the under parts.]

C.—Very small; bill exceedingly slender and compressed; tarsus shorter than the middle toe and claw.

22. *CHROICOCEPHALUS MINUTUS* Bruch ex Gmel.

*Larus minutus*, Gmel. 1788. *Hydrocolæus minutus*, Kaup, 1829. *Xema minutum*, Bp. 1838. *Gavia minuta*, Macgill. 1842. *Chroicocephalus minutus*, Bruch, 1855. *Larus melanotis*, Lesson, fide Bruch.

*Sp. Char.*—Smallest of the genus. Length 11·50. Bill above ·90, along gape 1·40; tarsus, ·90, middle toe and claw 1·10. Under surface of wings deep blackish slate.

*Habitat.*—Europe. ? Northern North America (accidental.)

Professor Baird thinks that there is no good reason to consider this bird an inhabitant of or even a visitor to North America. It has been included in our fauna on the strength of a statement of Sabine, who saw a small Gull, with black head and bill, greatly resembling the *Larus minutus*. This, however, was before *Larus Bonapartei* (*Chroicocephalus Philadelphia*) was described and made known by Richardson in the F. B. A., and a poorly preserved or immature specimen might easily be referred to *Larus minutus* by one ignorant of the existence of two species.

Genus VI. *RHODOSTETHIA* Macgill.

*Rossia*, Bp. 1838; (nec Owen.)

*Rhodostethia*, Macgill. 1842; (t. *Larus roseus* Macgill.)

23. *RHODOSTETHIA ROSEA* Bp. ex Macgill.

*Larus roseus*, Macgill. 1824; descriptio nulla. *Rhodostethia rosea*, Bp. *Rossia rosea*, Bp. 1837. *Larus Rossii*, Richardson, 1825; descriptio hujus avis prima. *Rhodostethia Rossii*, Macgill. 1824.

*Sp. Char.*—"Scapulars, inter-scapulars, and both surfaces of the wings clear pearl gray; outer web of the first quill blackish brown to its tip, which is gray; tips of the scapular and lesser quills whitish. Some small feathers near the eye, and a collar round the middle of the neck, pitch-black. Rest of plumage white, the neck above and whole under plumage deeply tinged with peach blossom red in recent specimens. Bill black, its rictus and the edges of the eyelids reddish orange. Legs and feet vermillion red; nails blackish. Length 14 inches, wing 10·5, tail 5·5. Bill above, ·75, along gape 1·25, tarsus 1.—1·12." (Richardson).

*Habitat.* Arctic Regions.

We have never had the pleasure of examining a specimen of this exquisite Gull, and are therefore obliged to copy the description from Richardson. This author admits that the bird was named *Larus roseus* the year before he called it *L. Rossii*; but claims precedence for his name, on the ground that his was the first published description.

Genus VII. *XEMA* Leach.

*Xema*, Leach, 1818; (fide Gen. Rep. t. *Larus Sabini*, J. Sab.)

*Gavia* Macgill. 1842. p.

24. *XEMA SABINI* Leach ex Sab.

*Larus Sabini*, J. Sab. 1818. *Xema Sabini*, Leach, 1825. *Gavia Sabini*, Macgill. 1842.

*Sp. Char.*—Adult, breeding plumage. Bill black to the angle, abruptly bright chrome from angle to tip. Mouth bright orange; eyelids orange; legs and feet black. Hood uniform clear deep slate, bounded inferiorly by a band, narrowest 1862.]

on the nape, of deep velvety black. Lower parts of neck all round, tail and its coverts, four inner primaries, secondaries, greater part of greater coverts, tips of tertials, except the innermost, and whole under parts, pure white. Mantle slatey blue, extending quite to the tips of the inner tertials. Edge of wing, from the carpal, with the bastard wing, black. First five primaries, with their shafts, black; their extreme tips, and the outer half of the inner webs, to near the end, white. Other primaries white, the sixth with a touch of black on the outer web; web near the base, extending a little on the inner web. Emargination of tail 1.25 inches. Length 13.75; wing 10.75. Bill 1.00, along gape 1.50, height at angle .30; tarsus 1.25, middle toe and claw same.

*Habitat*.—Arctic America. Lake Winnipeg. (Kennicott.)

The preceding description was drawn up from a very beautiful and perfect specimen, collected on Lake Winnipeg by Mr. Kennicott.

Genus VIII. CREAGRUS Bonap.

*Creagrus* Bp. 1854. fide gen. Rep.

25. CREAGRUS FURCATUS (Neboux.)

*Larus furcatus* Neboux. *Xema furcatus*. Bruch 1853. *Creagrus furcatus* Bruch 1855.

*Sp. Char.*—"Adult: Head and nearly all of the neck grayish brown; two small rounded white spots embracing symmetrically the base of the upper mandible; mantle grayish white; breast, abdomen, and under wing coverts white; wings extend beyond the tail; primaries black on their inner and outer edges; the smaller wing coverts white; the greater slate color bordered with white; tail very much forked and white, the two outer tail feathers much longer than is usual in this class of birds; bill very much bent, black at the base and white at the extremity; iris red; eyelids orange; tarsi and feet red; claws black.

"Total length 60 centimetres."

"*Habitat*.—California."

Of this rare and remarkable Gull I have never seen a specimen; but copy the description from the General Report, to complete this very cursory notice of the Gulls of North America.

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**Catalogue of Birds collected by the United States North Pacific Surveying and Exploring Expedition, in command of Capt. John Rodgers, United States Navy, with notes and descriptions of new species.**

BY JOHN CASSIN.

1. *FALCO PEREGRINUS*, Gmelin.

From Japan.

We find in the collection one very fine adult specimen, quite identical with specimens from Asia in the Museum of the Academy, and the first ever brought to this country from Japan. Mr. Stimpson's note is, "shot by Mr. Charles Wright in the hills west of the city of Hakodadi, Island of Jesso, June, 1855."

2. *MICRONISUS BADIUS*, (Gmelin).

From China. "Hong Kong, March, 1855, collected by Mr. Salvadora Pelkey." (Mr. Stimpson.)

3. *BUTEO VULGARIS*, Bechstein.

*Buteo vulgaris japonicus*, Temm. and Schleg., Faun. Japon. Aves, p. 16. From China. The only specimen is in light colored plumage and not adult. "Common about the harbor of Hong Kong, March, 1855." (Mr. Stimpson.)

4. *MILVUS GOVINDA*, Sykes.

*Milvus melanotis*, Temm. and Schleg., Faun. Jap. Aves, p. 14, (1850).

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